

REMARKS

The courteous interview granted to Applicants' undersigned attorney of record by Examiner George and Supervisory Examiner Norton on January 31, 2006, is hereby acknowledged with appreciation. At the interview, the invention, the outstanding Office Action, and the prior art of record were thoroughly reviewed.

Applicant has removed the tangential flow filtration step from the main process claim 14 and inserted it into new claim 23. It is submitted that new claim 23 is patentable for the reasons set forth below, as well as because of the unobviousness of using the claimed filtration apparatus in a clay ion-exchange process.

As pointed out in Applicants' last response, and at the interview of January 31, 2006, the primary Mathur et al. patent is only prior art for what is disclosed in the provisional application. The provisional application (60/455,216) does not disclose (1) the use of a smectite clay as an abrasive particle in a chemical mechanical polishing (CMP) process, although it cites 4,549,374 at page 3, lines 19-21 for using a smectite clay for a CMP process, or (2) the use of an ion-exchanged smectite clay as an abrasive in a CMP process.

Also discussed at the interview of January 31, 2006, was the fact that the secondary reference to Ross (6,380,295) teaches the desirability of ion-exchanging a smectite clay only for the purpose of making a polymer/clay nanocomposite or polymer/clay rheological additive. Ross '295 neither discloses nor suggests that the ion-exchanged clay would be useful without element (c) a non-anionic polymer that is absorbed by the clay (see col. 7, lines 65⁺ to col. 8, lines 1 - 35), or that the polymer-absorbed clay would be useful as an abrasive material in a CMP process.

As explained at the interview of January 31, 2006, Applicants are the first to use an ion-exchanged smectite clay as an abrasive particle in a CMP process. Applicants' claimed process is neither disclosed nor suggested in the prior art of record.

It is submitted, therefore, that the rejection under 35 U.S.C. §103(a) based on the combination of Mathur et al. and Ross, should be withdrawn.

Application No. 10/677,433
Amendment dated February 3, 2006
Reply to Office Action of November 15, 2005


Docket No.: 28569/38510

All claims are now of proper form and scope for allowance. Early and favorable consideration is respectfully requested.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 13-2855, under Order No. 28569/38510 from which the undersigned is authorized to draw.

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Respectfully submitted,

By 

Richard H. Anderson

Registration No.: 26,526

MARSHALL, GERSTEIN & BORUN LLP

233 S. Wacker Drive, Suite 6300

Sears Tower

Chicago, Illinois 60606-6357

(312) 474-6300

Attorney for Applicant